CLAIMS

1. A process for producing a 2-halogenobenzamide compound represented by general formula (I):

$$Y^{1} \xrightarrow{X} O R^{1} R^{2}$$

$$Y^{2} \xrightarrow{N} X^{1} SO_{2} R^{5}$$

$$Y^{2} \xrightarrow{Y^{3}} Y^{4} R^{6} R^{3} R^{4}$$

$$Y^{2} \xrightarrow{Y^{3}} Y^{4} R^{6} R^{3} R^{4}$$

$$Y^{3} \xrightarrow{Y^{4}} Y^{5} R^{5} R^{5}$$

$$Y^{4} R^{6} R^{3} R^{4}$$

$$Y^{5} R^{5} R^{5} R^{5} R^{5}$$

(wherein X, R¹, R², R³, R⁴, R⁵, R⁶, Y¹, Y², Y³, Y⁴ and k are as defined below), characterized by allowing a halogenating agent to react with a benzamide compound represented by general formula (II):

(wherein each of R^1 , R^2 , R^3 , R^4 and R^6 , which may be the same or different, is a hydrogen atom or a (C_1-C_6) alkyl group, R^5 is a hydrogen atom; a halogen atom; a cyano group; a nitro group; a (C_1-C_6) alkyl group; a (C_1-C_6) alkylcarbonyl group; a carboxyl group; a (C_1-C_6) alkoxycarbonyl group; a phenylcarbonyl group; a substituted phenylcarbonyl group having one or more

substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, (C_1-C_6) alkoxy groups, halo (C_1-C_6) C_6) alkyl groups and halo(C_1-C_6) alkoxy groups; a benzylcarbonyl group; a substituted benzylcarbonyl group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C1-C6)alkyl groups, (C_1-C_6) alkoxy groups, halo (C_1-C_6) alkyl groups and halo(C_1-C_6)alkoxy groups; $-CON(R^7)R^8$ (wherein each of R^7 and R⁸, which may be the same or different, is a hydrogen atom; a (C_1-C_6) alkyl group; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, (C_1-C_6) alkoxy groups, halo (C_1-C_6) C_6) alkyl groups and halo (C_1-C_6) alkoxy groups; a pyridyl group; a substituted pyridyl group having one or more substituents which may be the same or different and are selected from hydrogen atom, halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, (C_1-C_6) alkoxy groups, halo (C_1-C_6) alkyl groups and halo (C_1-C_6) alkoxy groups; a benzyl group; or a substituted benzyl group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C1-C6) alkyl groups, (C_1-C_6) alkoxy groups, halo (C_1-C_6) alkyl groups and halo(C_1-C_6)alkoxy groups); $-N(R^7)-COR^8$ (wherein R^7 and R^8

are as defined above); a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C1-C6) alkyl groups, halo (C_1-C_6) alkyl groups, (C_1-C_6) alkoxy groups and halo(C₁-C₆)alkoxy groups; a phenoxy group; a substituted phenoxy group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C1-C6) alkyl groups, halo (C_1-C_6) alkyl groups, (C_1-C_6) alkoxy groups and halo (C_1-C_6) alkoxy groups; a heteroaryloxy group; or a substituted heteroaryloxy group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, halo (C_1-C_6) alkyl groups, (C_1-C_6) C_6) alkoxy groups and halo (C_1-C_6) alkoxy groups, any adjacent two members of a group consisting of Y1, Y2, Y3 and Y4 being able to bind to each other to form a fused ring comprising a (C_3-C_4) alkylene group or a (C_3-C_4) C4) alkenylene group, which may have on the ring one or more substituents which may be the same or different and are selected from halogen atoms; cyano group; nitro group; (C_1-C_6) alkyl groups; (C_1-C_6) alkylcarbonyl groups; carboxyl group; (C_1-C_{12}) alkoxycarbonyl groups; phenyl group; substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, (C_1-C_6) alkoxy groups, halo (C_1-C_6)

 C_6) alkyl groups and halo (C_1-C_6) alkoxy groups; benzyl group; and substituted benzyl groups having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, (C_1-C_6) alkoxy groups, halo (C_1-C_6) alkyl groups and halo (C_1-C_6) alkoxy groups) in the presence of a palladium catalyst to obtain a substituted benzamide compound represented by general formula (III):

$$Y^{1}$$
 X
 Y^{1}
 X
 X
 Y^{1}
 X
 Y^{2}
 Y^{3}
 Y^{4}
 X^{1}
 Y^{2}
 Y^{3}
 Y^{4}
 Y^{2}
 Y^{3}
 Y^{4}
 Y^{6}
 Y^{2}
 Y^{3}
 Y^{4}
 Y^{2}
 Y^{3}
 Y^{4}
 Y^{5}
 Y^{4}
 Y^{5}
 Y^{5

(wherein X is a chlorine atom, a bromine atom or an iodine atom, and R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , Y^1 , Y^2 , Y^3 , Y^4 , K and m are as defined above), and then allowing the substituted benzamide compound of general formula (III) obtained, to react with an oxidizing agent after or without isolating the substituted benzamide compound.

2. A production process according to claim 1, wherein each of Y^1 , Y^2 , Y^3 and Y^4 , which may be the same or different, is a hydrogen atom; a halogen atom; a cyano group; a nitro group; a (C_1-C_6) alkyl group; a (C_1-C_6) alkylcarbonyl group; a carboxyl group; a (C_1-C_6) alkoxycarbonyl group; -CON(R^7) R^8 (wherein R^7 and R^8 are as defined in claim 1); a phenyl group; a

·substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, halo (C_1-C_6) alkyl groups, (C_1-C_6) C_6) alkoxy groups and halo (C_1-C_6) alkoxy groups; a phenoxy group; a substituted phenoxy group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, halo (C_1-C_6) alkyl groups, (C_1-C_6) C_6) alkoxy groups and halo (C_1-C_6) alkoxy groups; a heteroaryloxy group; or a substituted heteroaryloxy group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C_1-C_6) alkyl groups, halo (C_1-C_6) C_6) alkyl groups, (C_1-C_6) alkoxy groups and halo (C_1-C_6) C₆) alkoxy groups.

- A production process according to claim 1, wherein each of Y^1 , Y^2 and Y^3 is a hydrogen atom and Y^4 is $-\text{CON}(\mathbb{R}^7)\,\mathbb{R}^8$ (wherein \mathbb{R}^7 and \mathbb{R}^8 are as defined in claim 1).
- 4. A production process according to any one of claims 1 to 3, wherein X is an iodine atom.